

asymptomatic and microscopy of an early morning urine specimen from him was negative for *T. vaginalis*.

When *T. vaginalis* has been isolated in children, the mode of transmission usually thought of has been sexual abuse. Charles (1991)⁴ showed the presence of *T. vaginalis* in 33 children below the age of 12 years among 115 juvenile and adolescent patients with leucorrhoea. He concluded that there was the possibility of transmission of this infestation through the communal use of water tanks, ponds, and rivers. Burch *et al*⁵ concluded that *T. vaginalis* can be transmitted by fomites, among individuals with a poor concept of hygiene and sanitation after isolating *T. vaginalis* from wet wash cloths of infected women. It is commonplace to have whole families in developing countries use the same bathing apparel. It is not unlikely that *T. vaginalis* can be transmitted within the family this way.

In the case report above, it is believed the three children contracted *T. vaginalis* from their mother, even though the protozoan could not be identified by microscopy in one of them, the vehicle of transmission being either the bathing sponge or towel shared by the family. While it can be presumed that the wife was infected through sexual intercourse by the husband or vice versa, it was impossible to prove that there had been any genital contact between the man and his daughters. Nevertheless, there was absolutely no evidence of sexual abuse and transmission through shared bathing equipment seems the most likely explanation.

Since the presence of a STD in a child has medico-legal implications, when *T. vaginalis* or any other pathogen known to be transmitted sexually is isolated from the vagina of children, the possibility of non sexual transmission through communal use of fomites as above, should be considered.

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- 1 Sivakumar K, DeSilva A, Basu B. *Trichomonas vaginalis* infection in a Lesbian. *Genitourin Med* 1989;65: 399-400.
- 2 Whittington JM. Epidemiology of infection with *Trichomonas vaginalis* in the light of improved diagnostic methods. *Br J Venereal Dis* 1957;33:80-91.
- 3 Bramley M. Study of female babies of women entering confinement with vaginal trichomoniasis. *Br J Venereal Dis* 1976;52:58-62.
- 4 Charles SX. Epidemiology of *Trichomonas vaginalis* in rural adolescent and juvenile children. *J Trop Paediatr* 1991;37(2):90.
- 5 Burch TA, Rees CW, Reardon LV. Epidemiological studies on human trichomoniasis. *Am J Trop Med Hyg* 1959; 8:312-8.

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Asthma in an AIDS patient with Norwegian scabies induced by bathing

Scabies is common among the HIV infected population.¹ Patients with advanced HIV disease are at risk of developing the atypical crusted, or Norwegian form of scabies in which the mite burden is extremely high.¹

Successful treatment of such patients involves bathing to remove crusted areas in addition to repeated applications of topical scabicides.²

We recently treated a patient with widespread Norwegian scabies and HIV encephalopathy who developed an anaphylactoid reaction to getting into a hot bath on two successive occasions. During the second episode, he became distressed, tachypnoeic and developed expiratory wheezing. He had an oxygen saturation of 79% on air. His systolic blood pressure fell from 110 mm Hg to 70 mm Hg with a heart rate of 140/min. All of the abnormal findings resolved within 30 minutes of his being removed from the bath and being given a salbutamol nebuliser. From then on he was bathed in tepid water until his skin had recovered. He required no further asthma treatment, and was not given corticosteroids at any time. He was not able to use a peak flow meter. There was no personal or family history of previous asthma or atopy.

During the period of his infestation, our patient had a marked eosinophilia, peaking at 6.1×10^9 ml. His total IgE was markedly raised. Two weeks after successful scabies treatment his eosinophil count had fallen to 0.4×10^9 ml⁻¹, and he was able to tolerate hot baths without wheezing or hypotension.

Typical scabies infestation in immunocompetent individuals frequently provokes a TH2 type immune response, with production of IgE and an eosinophilia³; such responses are reported to be relatively well preserved, or exaggerated, in HIV infected individuals.⁴ IgE directed against scabies mite antigens cross reacts with house dust mite antigens.³ Asthma resulting from parasitic infections is well described,⁵ but has not previously been associated with scabies. Increased antigen absorption following cutaneous vasodilation in response to immersion in hot water may have precipitated our patient's asthmatic attacks. Scabies infestation may be a predisposing factor for the development of IgE mediated hypersensitivity reactions in patients with AIDS.

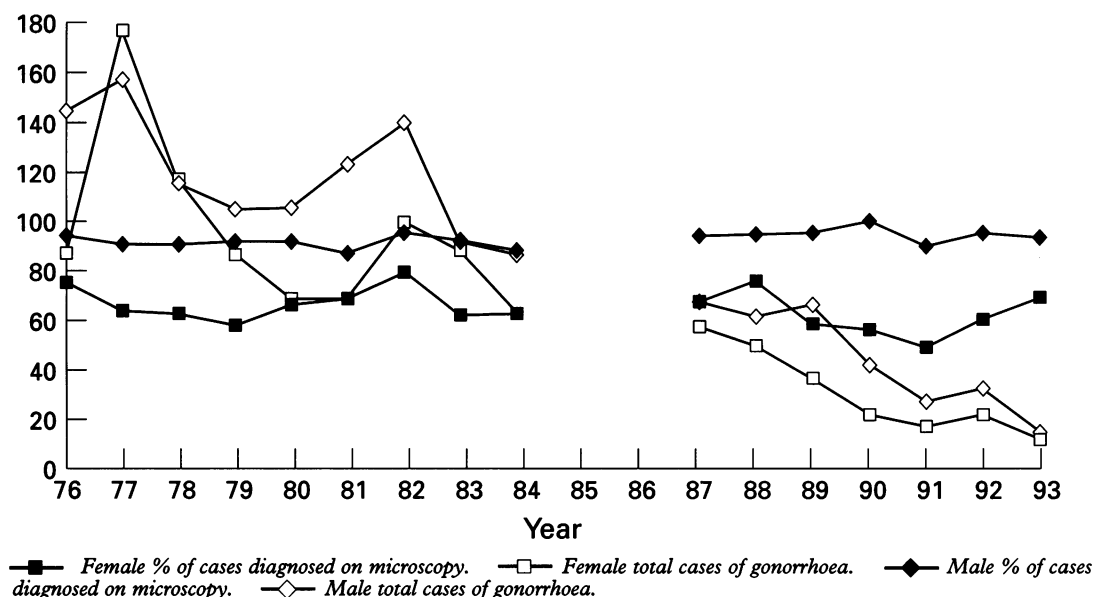
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- 1 Orkin M. Scabies in AIDS. *Semin Dermatol* 1993;12:9-14.
- 2 Orkin M, Maibach HI. Scabies therapy 1993. *Semin Dermatol* 1993;12:22-25.
- 3 Cabrera R, Agar A, Dahl MV. The immunology of scabies. *Semin Dermatology* 1993;12:15-21.
- 4 Clerici M, Shearer GM. A TH1 to TH2 switch is a critical step in the aetiology of HIV infection. *Immunol Today* 1992;14:107-11.
- 5 Neva FA, Ottesen EA. Current concepts in parasitology. Tropical (filarial) eosinophilia. *N Engl J Med* 1978;298: 1129-31.

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Diagnosis of gonorrhoea by microscopy

Microscopy of Gram stained specimens remains the initial screening test for gonorrhoea, and facilitates early treatment. A recent audit of microscopy has suggested that the sensitivity of this technique is falling,



particularly in women (29% in 1991 c.f. 70% in 1970).¹ We have data comparing diagnosis by microscopy and culture for most years from 1976. In all our data, the figures given are for the overall sensitivity of microscopy, and do not differentiate between sites of sampling.

Over the period for which data are available, the total number of cases of gonorrhoea has fallen from a peak of 333 in 1977, to only 21 in 1993. This fall has not been matched by a fall in the sensitivity of microscopic diagnosis apart from one year (1991), which we attribute to a change in personnel.

Of male cases of gonorrhoea 11/12 (91.7%) were diagnosed by microscopy in 1993 compared with 135/144 (93.8%) in 1976 (no significant difference: $p = 0.98$).

Of female cases of gonorrhoea 6/9 (66.7%) were diagnosed by microscopy in 1993 compared with 65/77 (74.7%) in 1976 (no significant difference: $p = 0.79$).

In this genitourinary (GUM) clinic most microscopy is done by the nursing staff, who are trained by more experienced members of the nursing team. Over this period training has been given mostly by one individual, which may also influence the relative constancy of the diagnostic sensitivity. In addition, our slides are retained until the results of culture are available, and any culture positive, slide negative cases are reviewed, providing useful feedback.

Although slide positive culture negative data are not included in the graph, there have been instances where a discrepancy between microscopy and culture has highlighted a problem with culture medium. Communication between the physicians, nursing and laboratory staff is obviously very important in alerting others if there is a high likelihood of a positive culture. In this clinic we also have an arrangement that any "slide positive" cases are cultured for a further 24 hours if no growth is seen initially, and this system has meant that some slow growing strains have been isolated. More recently, arrangements have been made for a review of slides by the

microbiologists in cases where there has been a discrepancy.

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1 Evans JK, Mercey DE, French PD, Prince MV. Audit of diagnosis of gonorrhoea at first visit to a London genitourinary medicine clinic. *Genitourinary Med* 1994;70:291-2.

It could be more serious than you think!

A 25 year old patient presented to this department on 5 April 1994 with a small lump in the left inguinal region since December 1993. He had no other associated symptoms, no history of trauma to the lower limbs, and no history of sex abroad.

On examination he had an enlarged (about 2 cm) very firm, non-tender lymph node in the left inguinal region. There was no other associated lymphadenopathy or hepatosplenomegaly. The rest of the examination was unremarkable; in particular there were no lesions found on the lower limbs. Syphilis serology was negative and cultures for *Neisseria gonorrhoeae*, *Chlamydia trachomatis* and herpes simplex virus were all negative. Gram stain of a urethral smear was unremarkable. An ultrasound of the abdomen showed normal liver and pancreas, and there was no intra-abdominal lymphadenopathy. An ultrasound of the scrotum showed normal testes and epididymis.

On 19 April 1994 biopsy was performed, which revealed T immunoblastic (high grade) lymphoma.

This case highlights the importance of keeping an open mind about the differential diagnosis, and considering an urgent biopsy in an enlarged inguinal lymph node which cannot be explained by a local identifiable cause.

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